



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,059	12/30/2003	Robert R. Scott	7678.815	1212
22913	7590	01/09/2006		
			EXAMINER	
			WILSON, JOHN J	
			ART UNIT	PAPER NUMBER
			3732	
				DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Tutor

Office Action Summary	Application No.	Applicant(s)	
	10/749,059	SCOTT, ROBERT R.	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 November 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2,4-11,14-16,23 and 24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 2,4-11,14-16,23 and 24 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 12/16/05.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2/24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 2, “an insulating layer” is unclear as to whether this is the same insulating layer referred to in claim 24.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-11/23, 14/23, 16/23 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (2002/0133970). Gordon shows a dental curing light, elongated housing 200, handle 202, light source 206, electronic circuitry 212, a polymer based heat sink 214 extending from the light source through at least a portion of the housing and surrounding the electric circuitry, Fig. 9, and an elongate metal heat sink 314 extending in the housing in the handle, Fig. 10. Gordon also shows using a metal heat sink 208 at the distal end and teaches that the heat sink 314 in the handle portion can be metal or other thermally conductive material [0044]. To from the heat sink in the handle from a polymer based heat sink material would have

Art Unit: 3732

been an obvious matter of choice in the use of known heat sink materials and in the desired locations of these materials to one of ordinary skill in the art in view of the suggestion in Gordon. As to claim 4, see paragraph [0045]. As to claim 5, the specific type of material used is an obvious matter of choice in known materials to the skilled artisan. As to claim 6, see LED use at [0039]. As to claim 7, see lens, Fig. 6. As to claim 8, see external power 108, [0031]. As to claim 9, see battery [0029]. As to claim 10, see controls 28, 30. As to claim 14, Gordon teaches the alternative of using thermally conductive epoxy or metal in the grip 202 [0044].

Claims 2/23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (2002/0133970) as applied to claim 23 above, and further in view of Becker (2003/0081430). Gordon shows heat sink 316, however, does not show insulating between the metal heat sink and the housing. Becker teaches using an air gap between the heat sink 60 and the casing [0029]. It would be obvious to one of ordinary skill in the art to modify Gordon to include insulating with an air gap as shown by Becker in order to not dissipate excessive heat to the handle.

Claim 15/23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (2002/0133970) as applied to claim 23 above, and further in view of Martin et al (5213103). Gordon shows a heat conducting polymer, however, does not state the type, and in specific, does not state that it includes heat conducting particles. Martin teaches using epoxy containing heat conducting particles, column 4, lines 3-6. It would be obvious to one of ordinary skill in the art to modify Gordon to include heat conducting particles as shown by Martin in order better dissipate heat.

Claims 2/24, 4-11/24, 14/24, 16/24 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (2002/0133970) in view of Becker (2003/0081430). Gordon shows a dental curing light, elongated housing 200, handle 202, light source 206, electronic circuitry 212, a polymer based heat sink 214 extending from the light source through at least a portion of the housing and surrounding the electric circuitry, Fig. 9, and an elongate metal heat sink 314 extending in the housing in the handle, Fig. 10. Gordon also shows using a metal heat sink 208 at the distal end and teaches that the heat sink 314 in the handle portion can be metal or other thermally conductive material [0044]. To from the heat sink in the handle from a polymer based heat sink material would have been an obvious matter of choice in the use of known heat sink materials and in the desired locations of these materials to one of ordinary skill in the art in view of the suggestion in Gordon. Gordon shows heat sink 316, however, does not show insulating between the metal heat sink and the housing. Becker teaches using an insulating air gap between the heat sink 60 and the casing [0029]. It would be obvious to one of ordinary skill in the art to modify Gordon to include insulating with an insulating layer as shown by Becker in order to not dissipate excessive heat to the handle.

Claim 15/24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al (2002/0133970) in view of Becker (2003/0081430) as applied to claim 24 above, and further in view of Martin et al (5213103). Gordon shows a heat conducting polymer, however, the above combination does not state the type, and in specific, does not state that it includes heat conducting particles. Martin teaches using epoxy containing heat conducting particles, column

Art Unit: 3732

4, lines 3-6. It would be obvious to one of ordinary skill in the art to modify the above combination to include heat conducting particles as shown by Martin in order better dissipate heat.

Response to Arguments

Applicant's arguments filed November 28, 2005 have been fully considered but they are not persuasive. As stated in the rejection above, Gordon suggests that the heat sink material used in the handle can be other heat sink materials, and as such, one of ordinary skill in the art would have found it obvious to use the known type of heat sink material in that location in order to obtain the desired known properties.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

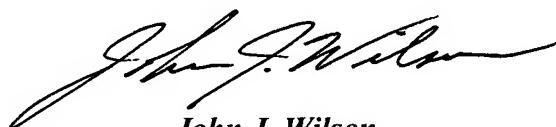
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver, can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Wilson
John J. Wilson
Primary Examiner
Art Unit 3732

jjw
January 4, 2006